## 1. INTRODUCTION

The Congestion Management Program statute, passed by the California State Legislature in 1990, requires that all elements of the Program be monitored at least biennially by the designated Congestion Management Agency (CMA)<sup>1</sup>. The Alameda County Congestion Management Agency, as the designated CMA for Alameda County, has established the Alameda County Congestion Management Program (CMP) which requires that Level of Service (LOS) standards be established and monitored biennially in even numbered years on the Alameda County CMP designated roadway system. The CMP system includes all of the major freeways and arterial roadways in Alameda County and is shown in Figure 1.

The objectives of this monitoring effort are:

- to determine the average travel speeds and existing LOS throughout Alameda County;
- · to identify those roadway segments in the County that are operating at LOS "F"; and
- to identify long-term trends in traffic congestion on the CMP network.

The CMP roadway system consists of approximately 230 miles. Of this total, 134 miles are freeways, 71 miles are conventional state highways, and 25 miles are City/County arterials. The full list of routes, summarized by jurisdiction, is shown in Table 2. Of the fifteen jurisdictions, Piedmont is the only city in Alameda County that does not have any roadways that are part of the CMP network.

The study of P.M. peak hour travel times has been conducted on the CMP network continuously since 1991. Starting in 1994, the study was expanded to include A.M. peak period runs on selected arterials and freeways. In 1996, the comparative travel times between auto and transit, and in one case bicycle, was also included for five selected origin-destination (O-D) pairs that reflect typical work trips in Alameda County. Over the years, additional O-D pairs were added, resulting in 10 home-work pairs being studied in 2004. In 2002, three pairs were added representing the three Bay bridges that connect to Alameda County. Bicycle counts at selected twelve (12) intersections across the County were also added in 2002.

2004 LOS Monitoring Study

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<sup>&</sup>lt;sup>1</sup> The most recent Alameda County Congestion Management Program (CMP) was adopted by the Alameda County Congestion Management Agency on January 29, 2004. The original CMP was adopted on October 24, 1991.

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<sup>&</sup>quot;Figure a record Absentia County Congression Management Program (Ch4P) von Mopinel by the Marcolla Stangerson Agency of Landay 25, 2004. Extracted CMP was adopted to October 26, 1991.

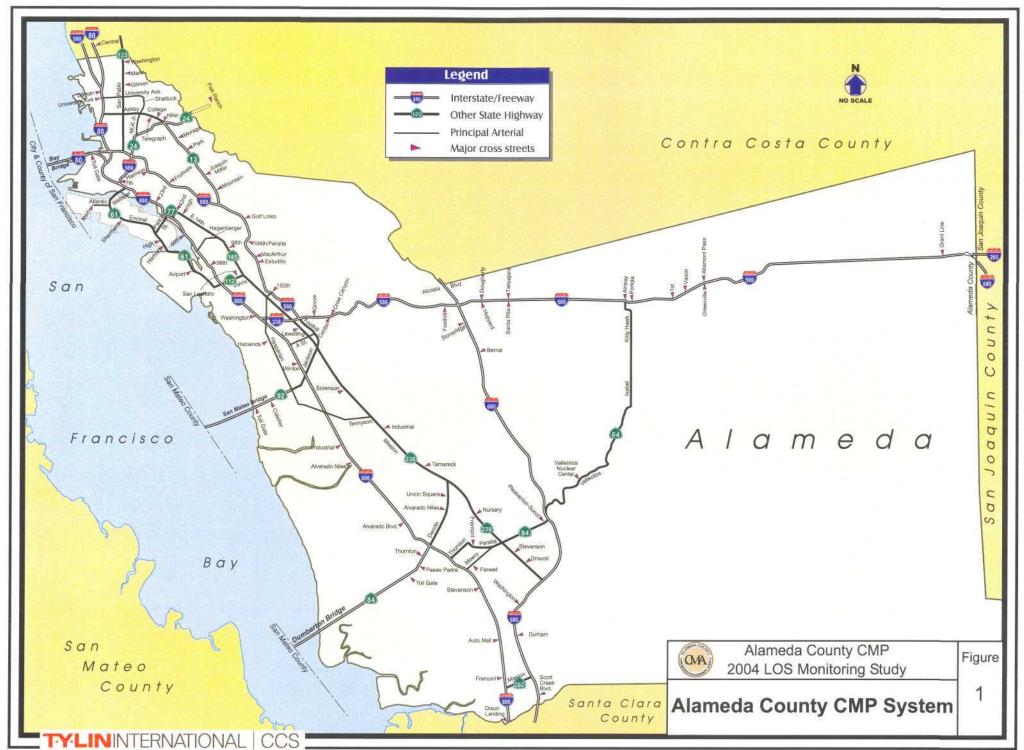


Table 2
Alameda County CMP Designated Roadway System<sup>2</sup>
Routes and Estimated Mileage by Jurisdiction

Jurisdiction	Freeway	Miles	Other State Highways	Miles	Other Arterials	Miles
Albany	I-80 I-580	0.61 0.92	SR 123 (San Pablo Ave.)	1.22	None	-
Berkeley	1-80	3.14	SR 123 (San Pablo Ave.) SR 13 (Ashby/Tunnel Rd.)	2.36 3.87	University Ave. Shattuck Ave. MLk Jr Blvd. Adeline	2.04 1.84
Emeryville	1-80	1.31	SR 123 (San Pablo Ave.)	0.68	None	-
Oakland	I-80 I-880 I-980 I-580 SR 24 SR 13	4.09 7.66 2.30 11.28 4.50 5.43	SR 123 (San Pablo Ave.) SR 13 (Tunnel Rd.) SR 61/260 (Tubes) SR 61 (Doolittle Dr.) SR 77 (42nd Ave.) SR 185 (E 14th St.)	1.19 0.10 0.66 2.39 0.31 3.98	MLK Jr. Blvd. Hegenberger Rd. 29th Ave./23rd Ave. -(See Park St- Alameda)	0.89 1.80 0.85
Piedmont	None		None	-	None	
Alameda	None	punding punding	SR 61 (Doolittle Dr., Otis, Webster St) SR 61/260 (Tubes)	4.47 0.65	Atlantic Ave. Park St.	0.80 0.55
San Leandro	I-880 I-580	3.78 2.95	SR 61 (Doolittle Dr.) SR 61/112 (Davis St.) SR 185 (E 14th St.)	0.70 1.78 3.16	150th Ave. Hesperian Blvd.	0.49
Hayward	I-880 SR 92	4.23 6.36	SR 185 (Mission Blvd.) SR 238 (Mission Blvd.) SR 238 (Foothill Blvd.) SR 92 (Jackson St.)	0.85 3.29 1.50 1.58	A St. Hesperian Blvd. Tennyson Rd.	1.61 2.60 2.32
Union City	1-880	1.70	SR 238 (Mission Blvd.)	2.57	Decoto Rd.	1.76
Fremont	I-680 I-880 SR 84	6.20 11.96 3.17	SR 238 (Mission Blvd.) SR 262 (Mission Blvd.) SR 84 (Thornton, Fremont, Mowry Ave.)	5.03 1.22 10.99	Decoto Rd. Mowry Ave.	1.15 2.96
Newark	SR 84	1.99	None	-	None	-
Pleasanton	I-580 I-680	4.65 5.26	None	-	None	-
Livermore	I-580	4.61	SR 84	5.29	None	-
Dublin	I-680	1.84	None	-	None	-
Unincorporated Areas	I-680 I-580 I-238 I-880	7.91 22.50 1.99 1.93	SR 84 (Vallecitos Rd.) SR 185 (Mission Blvd & E 14th) SR 238 (Foothill Blvd.)	7.97 2.47 0.79	Hesperian Blvd.	1.99
Totals		134 mi		71 mi		25 m

<sup>&</sup>lt;sup>2</sup> As adopted by the Alameda County Congestion Management Agency, October 24, 1991. except for the re-aligned State Rte 84 in Livermore that has been changed in the 2004 Study.

## LEVEL OF SERVICE

Roads and intersections are evaluated in terms of "Level of Service" (LOS) which is a measure of driving conditions and vehicle delay. Levels of Service range from "A" (the best) to LOS "F" (the poorest).

- Levels of Service A, B, and C indicate conditions where traffic can move relatively freely.
- Level of Service D describes conditions where delay is more noticeable.
- Level of Service E describes conditions where traffic volumes are at or close to capacity, resulting in significant delays.
- Level of Service F characterizes conditions where traffic demand exceeds the available capacity, with very slow speeds (stop-and-go), long delays (over one minute at intersections), and average speeds of less than half of the uncongested or free-flow speed.

## CMP LEVEL OF SERVICE STANDARDS

The CMP statute requires that a level of service standard be established for the designated CMP system roadways. Each year, member agencies must demonstrate that all CMP system roadways within their jurisdictions are operating at or above the CMP traffic LOS standard. A member agency's gas tax subventions may be withheld if the member agency does not maintain the traffic LOS standard or have an approved deficiency plan for roadways that fall below the LOS standard.

The basic level of service standard for CMP monitoring purposes is LOS "E". An exception is made for roadways that operated at LOS "F" in the 1991 "baseline" conditions. These roadways were "grandfathered" at LOS "F".